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CLAIMS

1. A diagnostic test for spongiform encephalopathy and other demyelinating conditions in mammals which comprises assaying antibodies present in the mammal which bind to an antigenic peptide which exhibits molecular mimicry of a mammalian myelin peptide.
2. A test according to Claim 1, in which the mammalian myelin peptide has the sequence FSWGAEQGK.
3. A test according to Claim 1 ~~or 2~~ for BSE in cattle.
4. A test according to Claim 3, using as the test antigen whole bacteria of an *Acinetobacter*, *Agrobacterium*, or *Ruminococcus* species.
5. A test according to Claim 4, using bacteria of the species *Acinetobacter calcoaceticus*, *Agrobacterium tumefaciens*, or *Ruminococcus albus*.
6. A test according to Claim 5, using as the test antigen a peptide derived from bacteria specified in Claim 4 ~~or 5~~.
7. A test according to Claim 6, using a peptide of sequence ISRFAWGEV, YTRFTWGAP, or YTQFEISAE.
8. A test according to Claim 6 ~~or 7~~, in which the peptide used is a synthetic peptide.
9. A method of testing for BSE in cattle which comprises assaying sera collected from the cattle for antibodies to a species of *Acinetobacter*, *Agrobacterium* or *Ruminococcus*, or a peptide having a sequence present in said species which mimics a peptide of bovine myelin and identifying animals having a level of antibodies at least about two standard deviations above that of healthy control animals.
10. A method according to claim 9, in which the bovine myelin peptide has the sequence FSWGAEQGK.
11. A diagnostic test kit for BSE in cattle comprising as test antigen a species of *Acinetobacter*, *Agrobacterium* or *Ruminococcus*, or a peptide having a sequence present in said species which mimics a peptide of bovine myelin.

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12. A test kit according to claim 11, in which the test antigen is a peptide which mimics the sequence FSWGAECOK.

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